IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicants: Louis Robert Litwin | Examiner: Quang N. Nguyen

Serial No: 10/567,717 | Group Art Unit: 2141

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For: AUTOLOGGING THE PRESENCE OF A WIRELESS LOCAL AREA NETWORK

Mail Stop Appeal Brief-Patents
Hon. Commissioner for Patents
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APPEAL BRIEF

Applicant appeals the status of claims 1-12 and 14-21 as presented in response to the Office Action dated December 26, 2007, and finally rejected in the Office Action dated May 28, 2008, pursuant to the Notice of Appeal filed on September 29, 2008 and submits this appeal brief.

TABLE OF CONTENTS:

C1. Claim 5 is patentable over Hsu in view of PAPA in further view of Rao, as the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data is not disclosed or rendered obvious by the prior art.

D. Whether Claims 9-12 and 15 are Unpatentable Under 35 U.S.C. §103(a) Over Hsu in View of PAPA.

D1. Claims 9-12 and 15 are patentable over Hsu in view of PAPA, as the feature of detecting the presence of a WLAN by identifying energy fluctuations without performing carrier recovery is not disclosed or rendered obvious by the prior art.

E. Whether Claims 8 and 14 are Unpatentable Under 35 U.S.C. §103(a) Over Hsu in View of PAPA in Further View of Sundar.

E1. Claims 8 and 14 are patentable over Hsu in view of PAPA in further view of Sundar, as the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data is not disclosed or rendered obvious by the prior art.

F. Whether Claims 16-21 are Unpatentable Under 35 U.S.C. §103(a) Over Hsu in View of PAPA.

F1. Claims 16-21 are patentable over Hsu in view of PAPA, as the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data is not disclosed or rendered obvious by the prior art.

G. Conclusion

8. CLAIMS APPENDIX

9. RELATED EVIDENCE APPENDIX

10. RELATING PROCEEDINGS APPENDIX

1. Real Party in Interest

The real party in interest is THOMSON LICENSING S.A., the assignee of the entire right title and interest in and to the subject application by virtue of an assignment recorded with the Patent Office on February 8, 2006 at reel/frame 017569/0771 and 017569/0742.

2. Related Appeals and Interferences

None.

3. Status of Claims

Claims 1-12 and 14-21 are pending. Claim 13 is canceled. Claims 1-12 and 14-21 stand rejected and are under appeal.

A copy of the claims 1-12 and 14-21 is presented in Section 8 below.

4. Status of Amendments

An amendment under 37 CFR §1.111, sent to the PTO on March 14, 2008 in response to the non-final Office Action dated December 26, 2007, was entered. An Response under 37 C.F.R. §1.116, sent to the PTO on August 11, 2008 in response to the final Office Action dated May 28, 2008, was also entered. No Responses/Amendments were filed subsequent to the above-recited Amendment sent on August 11, 2008.

5. Summary of Claimed Subject Matter

Claim 1 is directed to a method including the steps of scanning (see, e.g., Specification,

element 408, FIG. 4; p. 6, lines 22-24), by a wireless local area network scanner in a wireless device (see, e.g., Specification, element 214, FIGS. 2-3), to detect the presence of a wireless local area network WLAN; detecting the presence of said wireless local area network by employing said wireless local area network scanner to identify energy fluctuations without a wireless local area network baseband circuit being activated to process data (see, e.g., Specification, element 338, FIGS. 3 and 5; element 410, FIG. 4; p. 8, lines 12-26; p. 10, lines 8-20, p. 11, lines 10-26); contacting a base station of said wireless local area network by the wireless local area network baseband circuit in said wireless device in response to detection of said wireless local area network to request location of said base station (see, e.g., Specification, element 1102, FIG. 11; p. 4, lines 7-11); and receiving location of said wireless local area network (see, e.g., Specification, p. 4, lines 11-13).

Claim 9 is directed to a wireless device (see, e.g., Specification, element 110, FIGS. 1-2) configured to carry out the following steps: scanning to detect presence of a wireless local area network WLAN (see, e.g., Specification, element 408, FIG. 4; p. 6, lines 22-24); detecting the presence of said wireless local area network by identifying energy fluctuations of a wireless local area network signal without performing carrier recovery to detect the presence of said wireless local area network (see, e.g., Specification, element 338, FIGS. 3 and 5; element 410, FIG. 4; p. 8, lines 12-26; p. 10, lines 8-20, p. 11, lines 10-26); requesting a base station of said wireless local area network detected for a location of said base station (see, e.g., Specification, element 1102, FIG. 11; p. 4, lines 7-11); and receiving and logging said location, on said wireless device, of said base station of said wireless local area network (see, e.g., Specification, p. 4, lines 11-14).

Claim 16 is directed to a mobile device (see, e.g., Specification, element 110, FIGS. 1-2) operable to communicate with a wireless communication network (see, e.g., Specification, FIG.

1, element 102) and a wireless local area network (WLAN) (see, e.g., Specification, FIG. 1, element 104), configured for carrying out the following steps: scanning to detect presence of a wireless local area network WLAN by a wireless local area network scanner in a wireless device (see, e.g., Specification, element 408, FIG. 4; p. 6, lines 22-24); detecting presence of said wireless local area network by employing said wireless local area network scanner to identify energy fluctuations without a wireless local area network baseband circuit being activated to process data (see, e.g., Specification, element 338, FIGS. 3 and 5; element 410, FIG. 4; p. 8, lines 12-26; p. 10, lines 8-20, p. 11, lines 10-26); contacting a base station of said wireless local area network detected to request location of said base station by the wireless local area network baseband circuit in said wireless device in response to detection of said wireless local area network (see, e.g., Specification, element 1102, FIG. 11; p. 4, lines 7-11); and receiving location of said wireless local area network (see, e.g., Specification, p. 4, lines 11-13).

6. Grounds of Rejection to be Reviewed on Appeal

Claims 1-4, 6-7, 9-12 and 15-21 currently stand rejected under 35 U.S.C. §103(a) in view of U.S. Patent Application Publication 2004/0205158 (hereinafter 'Hsu') and a section of the Specification of the present application that the Examiner purports is admitted prior art (hereinafter 'PAPA'). The Examiner has also cited "Clock Solutions for WiFi (IEEE 802.11)" by Brandon Ogilvie (hereinafter 'Ogilvie') and U.S. Patent No. 7,110,783 to Bahl et al. (hereinafter 'Bahl') in support of the rejection.

Claim 5 currently stands rejected under §103(a) in view of Hsu and PAPA in further view of U.S. Patent Application Publication No. 2004/0264395 (hereinafter 'Rao').

Claims 8 and 14 currently stand rejected under 35 U.S.C. §103(a) in view of Hsu and PAPA and in further view of U.S. Patent Application Publication No. 2003/0134650 (hereinafter 'Sundar').

The preceding rejection is presented for review in this Appeal.

Regarding the grouping of the claims, due to their respective dependencies, claims 2-8 stand or fall with claim 1; claims 10-12, 14 and 15 stand or fall with claim 9; and claims 17-21 stand or fall with claim 16.

7. Argument

A. Introduction

In general, aspects of the present principles are directed to detecting the presence of a wireless local area network (WLAN) in an energy-efficient manner. According to various implementations of the present principles, a mobile device may detect the presence of a WLAN by identifying periodic energy fluctuations corresponding to standard WLAN beacons that are cyclically transmitted at a programmable rate (see, e.g., Specification, p. 8, lines 11-23). For example, a mobile device may be configured to perform a recursive average computation on received random, noise-like radio frequency (RF) waves to extract energy fluctuations (see, e.g., Specification, FIGS. 7-8; p. 9, line 20 to p. 10, line 7). In addition, the mobile device may be further configured to count the number of energy fluctuations within a certain period to determine whether they match the period of a WLAN beacon (see, e.g., Specification, p. 11, lines 10-26). Identifying energy fluctuations in this way permits the mobile device to distinguish WLAN beacons from radio frequency emissions emanating from cellular telephones, pagers and other wireless devices. Furthermore, because the mobile device only scans for energy fluctuations and does not recover data from received signals during WLAN detection, a WLAN

baseband circuit in the mobile device need not be activated to detect the presence of a WLAN (see, e.g., Specification, p. 10, lines 8-20). Accordingly, power may be conserved and battery life of the mobile device may be extended.

Independent claims 1 and 16 include the feature of detecting the presence of a WLAN by identifying energy fluctuations without a wireless local area network baseband circuit being activated to process data. Similarly, independent claim 9 includes the feature of detecting the presence of a WLAN by identifying energy fluctuations of a WLAN signal without performing carrier recovery, which is performed to extract data from a WLAN signal. It is respectfully submitted that the prior art cited by the Examiner in support of the rejections fail to disclose or render obvious at least these features of the independent claims. Accordingly, as discussed herein below, claims 1, 9 and 16 are patentably distinct and non-obvious over the references cited by the Examiner.

B. Whether Claims 1-4, 6 and 7 are Unpatentable Under 35 U.S.C. §103(a) Over Hsu in View of PAPA.

B1. Claims 1-4, 6 and 7 are patentable over Hsu in view of PAPA, as the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data is not disclosed or rendered obvious by the prior art.

Because detecting the presence of a WLAN by identifying energy fluctuations without having a WLAN baseband circuit activated for data processing is not disclosed or rendered obvious by the cited prior art, claims 1-4, 6 and 7 are patentable over the prior art. Claimed subject matter is unpatentable under 35 U.S.C. 103(a) "if the differences between the subject matter sought to be protected and the prior art are such that the subject matter as a whole would have been obvious at the

time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." KSR International Co. v. Teleflex, Inc., 127 S.Ct.1727, 1734 (quoting 35 U.S.C. 103(a)). Subject matter recited in claim 1 includes:

> A method, comprising:
>
> scanning, by a wireless local area network scanner in a wireless device, to detect the presence of a wireless local area network WLAN;
>
> detecting the presence of said wireless local area network by employing said wireless local area network scanner to identify energy fluctuations without a wireless local area network baseband circuit being activated to process data;
>
> contacting a base station of said wireless local area network by the wireless local area network baseband circuit in said wireless device in response to detection of said wireless local area network to request location of said base station; and
>
> receiving location of said wireless local area network.

(emphasis added). It is respectfully submitted that Hsu and PAPA do not render claim 1 unpatentable, as the prior art does not disclose or render obvious at least the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data.

Hsu is directed to a method and apparatus for detecting and selecting a WLAN in a mobile device. Although Hsu discloses detecting a WLAN by performing active or passive scanning for WLAN beacons or probe responses (see, e.g., HSU, para. 83), Hsu does not disclose or render obvious identifying or extracting energy fluctuations to detect the presence of a WLAN. For example, as discussed above, in accordance with aspects of the present principles, energy fluctuations may be identified by extracting or distinguishing them from received random, noise-like RF waves (see, e.g., Specification, FIGS. 7-8). Hsu merely states that a mobile device scans for

WLAN beacons or Probe Responses. Nowhere does Hsu disclose or render obvious identifying energy fluctuations to detect the presence of a WLAN.

Furthermore, Hsu also fails to disclose that a WLAN baseband circuit is not activated for data processing during WLAN detection. In the passive or active scanning methods described in Hsu, WLAN coverage is detected in the mobile device by processing and matching an ESSID transmitted in the WLAN beacon or processing a Probe Response received from a WLAN access point (see, e.g., Hsu, para. 83, lines 8-14; para. 83, lines 15-19). Thus, Hsu describes detecting a WLAN by processing data. Hsu does not disclose or render obvious detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data.

To cure the deficiencies of Hsu, the Examiner cites the Applicant's specification to assert that identifying energy fluctuations without a WLAN baseband circuit being activated to process data is admitted prior art (see, e.g., Final Office Action dated August 27, 2008, p. 3, para. 4-5; p. 4, para. 1). The paragraph of the Specification including the cited section is provided below:

> To detect the energy pulses 806, the present invention employs the energy change detector 516. As described below with respect to FIG. 6, the energy change detector 516 detects the energy pulses 806 and generates a WLAN present signal to send to the controller 330. Since the present invention is only scanning for the presence of energy fluctuations in an RF signal, and is not recovering data from the RF signal, the present invention advantageously obviates the need to synchronize the RF signal and perform carrier recovery. The frequency reference accuracy specified in WLAN standards (e.g., .+-.25 ppm as specified in the IEEE 802.11b standard) can allow the PLL circuit 314 to operate without automatic frequency control (AFC) provided by the WLAN baseband circuitry. As such, the WLAN baseband circuitry 208 does not have to be activated to detect the presence of the WLAN, thereby conserving power and saving battery life in the mobile device.

Specification, p. 10, lines 8-20 (emphasis added).

Despite the Examiner's assertions otherwise, the cited section does not admit that identifying energy fluctuations without a WLAN baseband circuit being activated to process data is well-known

in the art. The cited section indicates only that a frequency reference accuracy, such as +- .25 ppm, specified in WLAN standards is known in the art. Concerning energy fluctuations and detection of a WLAN without having a baseband circuit activated to process data, the Specification recites conclusions that the inventors have conceived. The cited section does not admit that anything regarding operation of a PLL circuit, automatic frequency control, carrier recovery, identifying energy fluctuations, or deactivating a WLAN baseband circuit during WLAN detection is prior art. Accordingly, the feature of identifying energy fluctuations without a WLAN baseband circuit being activated to process data is not admitted prior art. As such, the cited section of the Specification, taken singly or in combination with Hsu, does not in any way render claim 1 unpatentable.

In the final rejection, the Examiner introduced Ogilvie and Bahl in support of the assertion that identifying energy fluctuations without a WLAN baseband circuit being activated to process data is known in the art (see, e.g., Final Office Action dated May 28, 2008, p. 9, lines 14-21; and p. 10, para. 1). With regard to Ogilvie, it should first be noted that Ogilvie is not a prior art reference, as it was published after the priority date of the present application, which is August 22, 2003, the date on which the present application was first filed in accordance with the Patent Cooperation Treaty. As noted in the bottom margin of Ogilvie, the publication date is "09/05/03," which is September 5, 2003 under the American dating convention of month/day/year. As evidence that the American dating convention was employed by Ogilvie, submitted herewith is Exhibit A, which was entered in the record on August 11, 2008 with the response to the final Office Action. Exhibit A is another reference from the same "Application Notes" series as Ogilvie, provided by Pericom, retrieved from http://www.pericom.com/applications/an_listall.php, which also lists the Ogilvie reference. Exhibit A is dated "08/18/04," clearly indicating that the Application Notes series employs the American

dating convention. Thus, Ogilvie was published after the priority date of the present application. Accordingly Ogilvie may not be utilized to demonstrate that features were known in the art at least because it is not a prior art reference.

However, even if Ogilvie was a prior art reference, Ogilvie, taken singly or in combination with Hsu, does not disclose or render obvious the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data. Ogilvie is, in general, a discussion of various applications for devices employed to process reference signals for wireless communication according to IEEE 802.11 standards. In support of the assertion that identifying energy fluctuations without a WLAN baseband circuit being activated to process data is known in the art, the Examiner has cited a section of Ogilvie describing a sleep mode for RF receivers (see, e.g., Final Office Action dated May 28, 2008, p. 9, lines 14-21). Specifically, the cited section states the following:

> Some designs for client NICs may use an industry-standard 32.768 kHz crystal for low-power "steep" mode to conserve battery power (preferred in most portable applications such as notebook computers). . . . While in sleep mode, most functions of the baseband/MAC and RF IC are shutdown. Meanwhile, the 32.768 kHz crystal remains active. The baseband/MAC will continue to receive and process the 32.768 kHz signal and use this to establish wake-up intervals. These regular wake-up intervals are necessary to 1) notify the AP that the client is still within the WLAN coverage area, and 2) check for queued data. During this wake-up period, the RF & baseband/MAC reference clock oscillator is activated to re-establish connection with the AP. Without these regular wake-ups, the AP will assume that the client has left the coverage area, rerouting any queued data.

Ogilvie, p. 3, column 2, paras.3-4. (emphasis added).

While Ogilvie describes that most functions of the baseband circuit may be deactivated in sleep mode, Ogilvie does not disclose that energy fluctuations are identified during this period. Indeed, the baseband circuit disclosed in Ogilvie does not process any signals whatsoever from the

access point during sleep mode. By way of explanation, because Ogilvie describes the wakeup period as a "re-establish[ment]" of an AP connection, Ogilvie teaches that a communication link with an access point is severed during sleep mode. Furthermore, in sleep mode, the baseband receives and processes a 32.768 kHz signal from its own internal 32.768 kHz crystal oscillator to establish a wakeup interval. The 32.768 kHz signal is not received from the access point. Thus, Ogilvie does not teach or render obvious identifying energy fluctuations without a WLAN baseband circuit being activated to process data at least because the baseband circuit disclosed in Ogilvie does not process any received WLAN signals or beacons during sleep mode.

As further evidence that signals or beacons from an access point are not in any way processed by the mobile device during sleep mode, Hsu provides additional details concerning the 802.11 power-saving sleep mode. For example, in accordance with the 802.11 power-saving mode, Hsu teaches that, prior to entering sleep mode, a mobile device sends a WLAN access point an indication of the number of beacons periods, N, for which the mobile device will be in sleep mode (see, e.g., Hsu, para. 88, lines 1-4). Every N periods, the mobile device wakes up just prior to receiving a beacon from the WLAN access point to determine whether any data addressed to it is queued at the access point (see, e.g., Hsu, para. 88, lines 10-12; para. 89, lines 13-14). Thus, the local, internal crystal oscillator signals described in Ogilvie are used by the mobile device in sleep mode to schedule the wakeup interval. The mobile device does not in any way process signals or beacons received from the WLAN access point during sleep mode. Accordingly, Ogilvie does not disclose or render obvious identifying energy fluctuations without a WLAN baseband circuit being activated to process data to detect the presence of a WLAN.

Furthermore, combination of Ogilvie and Hsu by one of ordinary skill in the art would not

result in the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data. As discussed above, the sleep mode feature is already disclosed in Hsu and is not configured to process any signals whatsoever from a WLAN. Moreover, neither Ogilvie nor Hsu remotely suggest or render obvious any method for detecting the presence of a WLAN while a device is in sleep mode. In contrast, as discussed above, various aspects of the present principles include identifying or extracting energy fluctuations from received RF waves and determining that a WLAN is present based on the cyclical period in which they are received (see, e.g., Specification, FIGS. 7-8; FIG. 6). Neither reference discloses or renders obvious any way of detecting the presence of a WLAN during a sleep mode in which a baseband circuit is not activated to process data. Therefore, detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data is not rendered obvious by Hsu and Ogivlie, taken singly or in combination.

In further support of the Examiner's assertion that identifying energy fluctuations without a WLAN baseband circuit being activated to process data is known in the art, the Examiner cites Bahl (see, e.g., Final Office Action, p. 10, para. 1). Bahl is directed to a method and system for scheduling communications between a WLAN access point and a plurality of mobile devices to avoid collision or interference resulting from simultaneous communication (see, e.g., Bahl, column 1, lines 21-25; column 2, lines 31-34). Specifically, Bahl teaches that power consumption of a mobile device may be reduced by including, in the mobile device, a low-power transceiver for receiving and processing scheduling information from a WLAN access point through a low-power channel and a high-power network interface card NIC for receiving and processing other data from a WLAN access point through a high-power channel (see, e.g., Bahl, column 2, lines 31-34; column 2,

line 46 to column 3, line 8). The high-power NIC may be idled or powered down until the scheduled time for data transmission over a high-powered channel (see, e.g., Bahl, column 2, line 67 to column 3, line 8) (see also, Bahl, column 9, lines 4-16).

Although Bahl discloses that a high-power NIC is powered down until a scheduled time for data transmission over a high-powered channel, Bahl does not disclose or render obvious the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data. With regard to detecting the presence of a WLAN, Bahl simply states that the low-power transceiver detects a detection signal from a host transceiver (see, e.g., Bahl, column 8, lines 35-41). Bahl does not provide any details whatsoever regarding how the low-power transceiver detects the detection signal. Thus, Bahl does not disclose or render obvious detecting the presence of a WLAN by identifying energy fluctuations, as discussed above. Furthermore, because the low-power transceivers (100, 102) process scheduling data and acknowledgements received from a WLAN access point (see, e.g., Bahl, FIG. 3, element 102; column 6, lines 7-13; column 8, lines 41-53), the low-power transceiver includes its own circuitry (102) for processing data received from a WLAN. Bahl nowhere discloses or renders obvious that the data processing circuitry of the low-power receiver is deactivated while it detects the presence of a WLAN. Therefore, Bahl, taken singly or in combination with either Hsu and/or Ogilvie, does not disclose or render obvious detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data.

Accordingly, claim 1 is patentable over Hsu, PAPA, Ogilvie and/or Bahl at least because the prior art fails to disclose or render obvious the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data.

Moreover, claims 2-4, 6 and 7 are patentable over Hsu, PAPA, Ogilvie and/or Bahl due at least to their dependencies on claim 1. As such, withdrawal of the rejection of claims 1-4, 6 and 7 is respectfully requested.

C. Whether Claim 5 is Unpatentable Under 35 U.S.C. §103(a) Over Hsu in View of PAPA in Further View of Rao.

C1. Claim 5 is patentable over Hsu in view of PAPA in further view of Rao, as the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data is not disclosed or rendered obvious by the prior art.

Because detecting the presence of a WLAN by identifying energy fluctuations without having a WLAN baseband circuit activated for data processing is not disclosed or rendered obvious by cited prior art, claim 5 is patentable over the prior art. Claimed subject matter is unpatentable under 35 U.S.C. 103(a) "if the differences between the subject matter sought to be protected and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." KSR International Co. v. Teleflex, Inc., 127 S.Ct.1727, 1734 (quoting 35 U.S.C. 103(a)). Claim 5 is dependent on claim 1. Thus, subject matter of claim 5 includes:

> A method, comprising:
>
> scanning, by a wireless local area network scanner in a wireless device, to detect the presence of a wireless local area network WLAN;
>
> detecting the presence of said wireless local area network by employing said wireless local area network scanner to identify energy fluctuations without a wireless local area network baseband circuit being activated to process data;
>
> contacting a base station of said wireless local area network by the wireless local

area network baseband circuit in said wireless device in response to detection of said wireless local area network to request location of said base station; and

receiving location of said wireless local area network.

(emphasis added).

As stated above, Hsu, PAPA, Ogilvie and Bahl do not render the claimed subject matter unpatentable, as the prior art does not disclose or render obvious at least the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data. Furthermore, Rao fails to cure the deficiencies of Hsu, PAPA, Ogilvie and Bahl.

Rao is directed to methods and apparatuses for automatically configuring a wireless network client by identifying wireless local network access points upon detecting a wireless local network message (see, e.g., Rao, paragraph 8). However, Rao merely states that WLAN access points are discovered and a broadcast message is detected by the wireless client (see, e.g., Rao, paragraphs 43 and 53). No specific details concerning how the WLAN access points are detected are provided by Rao in any way. Moreover, the reference certainly does not disclose or remotely suggest that a baseband circuit is deactivated while identifying a WLAN broadcast message to detect the presence of a wireless network.

Accordingly, claim 5 is patentable at least because Rao, Hsu, the minor details described in PAPA as being specified in the IEEE 802.11b standard, Ogilvie and Bahl, taken singly or in combination, fail to disclose or render obvious the feature of detecting the presence of a wireless local area network by identifying energy fluctuations without a wireless local area network baseband circuit being activated to process data. As such, withdrawal of the rejection of claim 5 is respectfully requested.

D. Whether Claims 9-12 and 15 are Unpatentable Under 35 U.S.C. §103(a) Over Hsu in View of PAPA.

D1. Claims 9-12 and 15 are patentable over Hsu in view of PAPA, as the feature of detecting the presence of a WLAN by identifying energy fluctuations without performing carrier recovery is not disclosed or rendered obvious by the prior art.

Because detecting the presence of a WLAN by identifying energy fluctuations without performing carrier recovery is not disclosed or rendered obvious by cited prior art, claims 9-12 and 15 are patentable over the prior art. Claimed subject matter is unpatentable under 35 U.S.C. 103(a) "if the differences between the subject matter sought to be protected and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." KSR International Co. v. Teleflex, Inc., 127 S.Ct.1727, 1734 (quoting 35 U.S.C. 103(a)). The subject matter recited in claim 9 includes:

> A wireless device configured to carry out the following steps:
>
> scanning to detect presence of a wireless local area network WLAN;
>
> detecting the presence of said wireless local area network by identifying energy fluctuations of a wireless local area network signal without performing carrier recovery to detect the presence of said wireless local area network;
>
> requesting a base station of said wireless local area network detected for a location of said base station; and
>
> receiving and logging said location, on said wireless device, of said base station of said wireless local area network.
>
> (emphasis added).

Carrier recovery is performed to extract data from a WLAN signal. As discussed above, Hsu, details described in PAPA as being specified in the 802.11b standard, Bahl and Ogilvie fail to disclose or render obvious detecting the presence of a WLAN by identifying energy fluctuations without having a WLAN baseband circuit activated to process data. Similarly, the prior art fails to disclose or render obvious detecting the presence of a WLAN by identifying energy fluctuations without performing carrier recovery, as carrier recovery is performed to extract data from a WLAN signal. Thus, claim 9 is patentable over the cited references. Moreover, claims 10-12 and 15 are also patentable due at least to their dependencies on claim 9. As such, withdrawal of the rejection of claims 9-12 and 15 is respectfully requested.

E. Whether Claims 8 and 14 are Unpatentable Under 35 U.S.C. §103(a) Over Hsu in View of PAPA in Further View of Sundar.

E1. Claims 8 and 14 are patentable over Hsu in view of PAPA in further view of Sundar, as the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data is not disclosed or rendered obvious by the prior art.

Because detecting the presence of a WLAN by identifying energy fluctuations without having a WLAN baseband circuit activated for data processing is not disclosed or rendered obvious by cited prior art, claims 8 and 14 are patentable over the prior art. Claimed subject matter is unpatentable under 35 U.S.C. 103(a) "if the differences between the subject matter sought to be protected and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter

pertains." KSR International Co. v. Teleflex, Inc., 127 S.Ct.1727, 1734 (quoting 35 U.S.C. 103(a)).

Claim 8 is dependent on claim 1. Thus, subject matter of claim 8 includes:

> A method, comprising:
>
> scanning, by a wireless local area network scanner in a wireless device, to detect the presence of a wireless local area network WLAN;
>
> detecting the presence of said wireless local area network by employing said wireless local area network scanner to identify energy fluctuations without a wireless local area network baseband circuit being activated to process data;
>
> contacting a base station of said wireless local area network by the wireless local area network baseband circuit in said wireless device in response to detection of said wireless local area network to request location of said base station; and
>
> receiving location of said wireless local area network.

(emphasis added). In addition, because claim 14 is dependent on claim 9, claim 14 includes:

> A wireless device configured to carry out the following steps:
>
> scanning to detect presence of a wireless local area network WLAN;
>
> detecting the presence of said wireless local area network by identifying energy fluctuations of a wireless local area network signal without performing carrier recovery to detect the presence of said wireless local area network;
>
> requesting a base station of said wireless local area network detected for a location of said base station; and
>
> receiving and logging said location, on said wireless device, of said base station of said wireless local area network.

(emphasis added).

As stated above, Hsu, PAPA, Ogilvie and Bahl do not render the claimed subject matter unpatentable, as the prior art does not disclose or render obvious at least the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data or by identifying energy fluctuations without performing carrier recovery.

Furthermore, Sundar fails to cure the deficiencies of Hsu, PAPA, Ogilvie and Bahl.

Sundar does not disclose or render obvious the feature of detecting the presence of a WLAN by identifying energy fluctuations without having a WLAN baseband circuit activated to process data. Firstly, Sundar merely discloses inferring the presence of a wireless LAN by detecting RF energy in the permitted frequency range (see, e.g., Sundar, paragraphs 55-58). Sundar does not disclose or remotely suggest identifying energy fluctuations to detect the presence of a wireless LAN. In contrast, as discussed above, in accordance with aspects of the present principles identifying or extracting energy fluctuations enables a mobile device to distinguish a WLAN from other devices that operate within the permitted frequency range, such as cellular telephones, pagers or other wireless devices. Sundar nowhere discloses or renders obvious identifying energy fluctuations to detect the presence of a WLAN.

Secondly, Sundar also fails to disclose detecting the presence of a WLAN without a wireless local area network baseband circuit being activated to process data. Rather, Sundar discloses processing a beacon frame to obtain an SSID, comparing the SSID to a list of SSIDs and if there is a match, inferring the presence of a valid WLAN (see, e.g., Sundar, paragraph 55-58). Extraction of an SSID necessarily entails the activation of a WLAN baseband circuit to process data. Thus, Sundar fails to disclose or remotely render obvious detecting the presence of a WLAN without a wireless local area network baseband circuit being activated to process data. Similarly, Sundar also fails to disclose or render obvious the claim 14 feature of detecting the presence of a WLAN without performing carrier recovery, as carrier recovery is performed to extract data from a WLAN carrier signal.

Accordingly, Sundar fails to disclose or render obvious the feature of "detecting the presence

of said wireless local area network by employing said wireless local area network scanner to identify energy fluctuations without a wireless local area network baseband circuit being activated to process data" and the feature of "detecting the presence of said wireless local area network by identifying energy fluctuations of a wireless local area network signal without performing carrier recovery to detect the presence of said wireless local area network," as included in claims 8 and 14, respectively. In addition, as discussed above, Hsu, Bahl and Ogilvie also fail to disclose or render obvious these features of claims 8 and 14. Moreover, as discussed above, Ogilvie and salient features concerning detection of a WLAN disclosed in PAPA cannot be relied upon in rejecting claims of the present application. Thus, claims 8 and 14 are believed to patentable for at least the reasons stated. Withdrawal of the rejection of claims 8 and 14 is respectfully requested.

F. Whether Claims 16-21 are Unpatentable Under 35 U.S.C. §103(a) Over Hsu in View of PAPA.

F1. Claims 16-21 are patentable over Hsu in view of PAPA, as the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data is not disclosed or rendered obvious by the prior art.

Because detecting the presence of a WLAN by identifying energy fluctuations without having a WLAN baseband circuit activated for data processing is not disclosed or rendered obvious by cited prior art, claims 16-21 are patentable over the prior art. Claimed subject matter is unpatentable under 35 U.S.C. 103(a) "if the differences between the subject matter sought to be protected and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains."

KSR International Co. v. Teleflex, Inc., 127 S.Ct.1727, 1734 (quoting 35 U.S.C. 103(a)). Subject matter recited in claim 16 includes:

> A mobile device operable to communicate with a wireless communication network and a wireless local area network (WLAN), configured for carrying out the following steps:
>
> scanning to detect presence of a wireless local area network WLAN by a wireless local area network scanner in a wireless device;
>
> detecting presence of said wireless local area network by employing said wireless local area network scanner to identify energy fluctuations without a wireless local area network baseband circuit being activated to process data;
>
> contacting a base station of said wireless local area network detected to request location of said base station by the wireless local area network baseband circuit in said wireless device in response to detection of said wireless local area network; and
>
> receiving location of said wireless local area network.

(emphasis added).

As discussed above, Hsu, Ogilvie, Bahl and the minor details that PAPA indicates is specified in the 802.11b standard, taken singly or in any combination, do not disclose or render obvious at least the feature of detecting the presence of a WLAN by identifying energy fluctuations without a WLAN baseband circuit being activated to process data. Thus, claim 16 is patentable over Hsu, Ogilvie, Bahl and/or PAPA. In addition, claims 17-21 are patentable over the prior art due at least to their dependencies on claim 16. Accordingly, withdrawal of the rejection of claims 16-21 is respectfully requested.

G. Conclusion

At least the above-identified limitations of the pending claims are not disclosed or rendered

obvious by the teachings of the prior art cited by the Examiner. Accordingly, it is respectfully requested that the Board reverse the rejection of claims 1-12 and 14-21 under 35 U.S.C. §103(a).

Please charge the amount of $540.00, covering fee associated with the filing of the Appeal Brief, to **Thomson Licensing LLC, Deposit Account No. 07-0832**. In the event of any non-payment or improper payment of a required fee, the Commissioner is authorized to charge **Deposit Account No. 07-0832** as required to correct the error.

Respectfully submitted,

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8. CLAIMS APPENDIX

1. (Previously Presented) A method, comprising:

scanning, by a wireless local area network scanner in a wireless device, to detect the presence of a wireless local area network WLAN;

detecting the presence of said wireless local area network by employing said wireless local area network scanner to identify energy fluctuations without a wireless local area network baseband circuit being activated to process data;

contacting a base station of said wireless local area network by the wireless local area network baseband circuit in said wireless device in response to detection of said wireless local area network to request location of said base station; and

receiving location of said wireless local area network.

2. (Previously Presented) The method according to claim 1, further comprising logging, on said wireless device, said location of said base station for future reference.

3. (Original) The method of claim 1, wherein said location comprises a map coordinate location of said base station.

4. (Original) The method of claim 1, wherein said location comprises one of a street address and longitude/latitude coordinates for said base station.

5. (Previously Presented) The method of claim 1, wherein said contacting further comprises comparing a media access control MAC address of said base station to a database of

known locations of base stations of wireless local area networks and not requesting a location if the contacted said base station is already in said database

6. (Original) The method of claim 2, wherein said logging of said location is one of an automated logging and a manual logging.

7. (Original) The method according to claim 1, wherein said location comprises global position coordinates.

8. (Original) The method of claim 1, wherein said detecting comprises detecting signature sequences from a wireless local area network.

9. (Previously presented) A wireless device configured to carry out the following steps:

scanning to detect presence of a wireless local area network WLAN;

detecting the presence of said wireless local area network by identifying energy fluctuations of a wireless local area network signal without performing carrier recovery to detect the presence of said wireless local area network;

requesting a base station of said wireless local area network detected for a location of said base station; and

receiving and logging said location, on said wireless device, of said base station of said wireless local area network.

10. (Original) The wireless device of claim 9, wherein said location comprises a map location of said base station.

11. (Previously Presented) The wireless device of claim 9, wherein said location comprises a street address for said base station.

12. (Previously Presented) The wireless device of claim 9, wherein said location comprises global position coordinates

13. (Canceled)

14. (Previously Presented) The wireless device of claim 9, wherein said detecting comprises detection of an energy signature from said wireless local area network.

15. (Previously Presented) The wireless device of claim 9, further comprising the step of displaying a location of a base station of a wireless local area network logged previously that is near said wireless device.

16. (Previously Presented) A mobile device operable to communicate with a wireless communication network and a wireless local area network (WLAN), configured for carrying out the following steps:

scanning to detect presence of a wireless local area network WLAN by a wireless local area network scanner in a wireless device;

detecting presence of said wireless local area network by employing said wireless local area network scanner to identify energy fluctuations without a wireless local area network baseband circuit being activated to process data;

contacting a base station of said wireless local area network detected to request location

of said base station by the wireless local area network baseband circuit in said wireless device in response to detection of said wireless local area network; and

receiving location of said wireless local area network.

17. (Previously Presented) The mobile device of claim 16, further comprising logging said location of said base station for future reference.

18. (Original) The mobile device of claim 16, wherein said location comprises a map coordinate location of said base station.

19. (Original) The mobile device of claim 16, wherein said location comprises a street address for said base station.

20. (Original) The mobile device of claim 16, wherein said location comprises global position coordinates.

21. (Previously Presented) The mobile device of claim 16, further comprising displaying a location of a logged bases station of a wireless local area network near a location input by a user.

9. EVIDENCE APPENDIX

Submitted herewith is the following Exhibit:

Exhibit A, entitled "DDR2: The Next Generation Main Memory," Application Note 78, Pericom Semiconductor Corporation, was entered together with a response to an Office Action in the record by the Examiner on August 11, 2008.

10. RELATED PROCEEDINGS APPENDIX

None